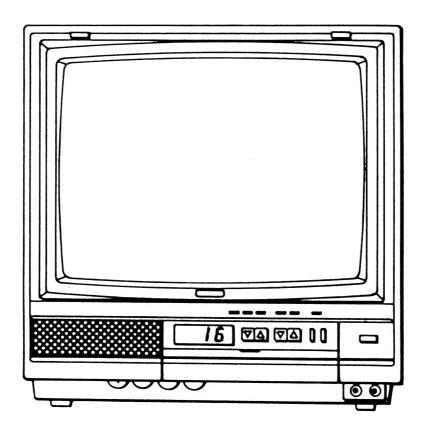
# Service Manual

Nachdruck bzw. Kopieren dieser Unterlagen ist grundsätzlich verboten!

## Solid State 14" Color Television Receiver

Model K-3714 R (mit FB)
K-3714 A (ohne FB)

PAL-B/G (FTZ)



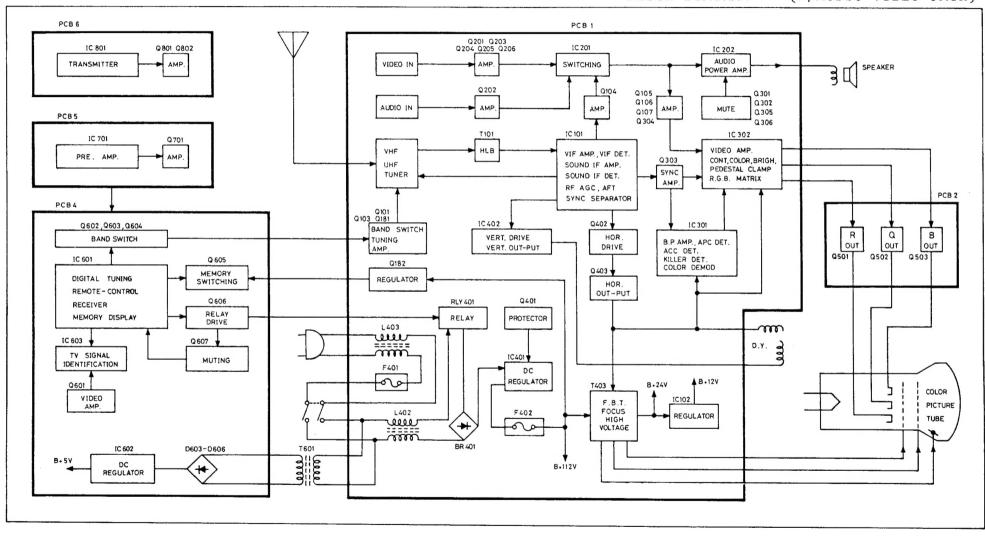
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## SPECIFICATION

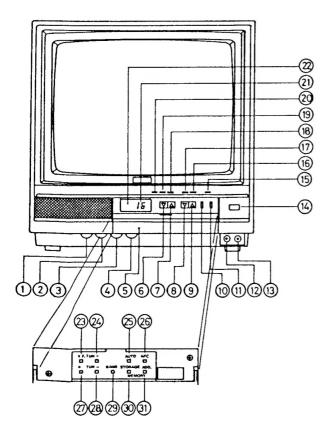
SYSTEM	:	PAL-B/G-FTZ (W. GERMANY)
CHANNEL COVERAGE VHF LOW VHF HIGH UHF	: , . :	2 - 4 CH 5 - 12 CH 21 - 69 CH
FREQUENCY RANGE VHF LOW VHF HIGH UHF	: : :	47 - 88 MHZ 174 - 230 MHZ 470 - 862 MHZ
SCANNING LINES HORIZONTAL VERTICAL	: : :	625 LINES 15625 HZ 50 HZ
IF FREQUENCY VIDEO SOUND CHROMA,	: : :	38.9 MHZ 33.4 MHZ 34.47 MHZ
VISION / SOUND SEPARATION	:	5.5 MHZ
SENSITIVITY VHF LOW VHF HIGH UHF	: :	32 uV 56 uV 80 uV
OUTPUT POWER MAXIMUM 10% THD	: :	900 mW 700 mW
CRT	:	14" (35.5CM) DIAGONAL ,22.5mm NECK DIAMETER, 90° DEFLECTION ANGLE.
SPEAKER	:	3.5" x 2" 16 OHM
ANTENNA IMPEDANCE	:	75 OHM
VIDEO INPUT *	:	1 Vp-p (POSITIVE VIDEO) 75 OHM IMPEDANCE
AUDIO INPUT *	:	0.5V r.m.s. (1 KHZ) 47K OHM IMPEDANCE

<sup>----</sup>REMARK \* OPTIONAL ----

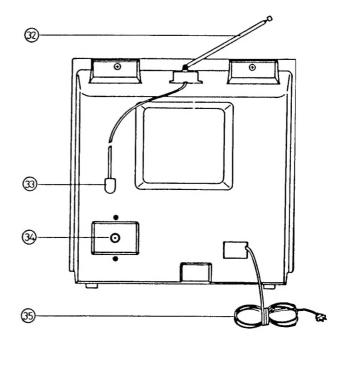


#### CONTROLS LOCATION :

- 1. Contrast Control
- 2. Brightness Control
- 3. Color Control
- 4. Vertical Hold Control
- 5. Panel Door
- 6. Channel Down Control
- 7. Channel Up Control
- 8. Volume Down Control
- 9. Volume Up Control
- 10. TV / VIDEO Selector
- 11. Stand By Control
- 12. Video-in Jack
- 13. Audio-in Jack
- 14. Power ON/OFF Switch
- 15. Stand By Indicator
- 16. Video Indicator
- 17. TV Indicator
- 18. UHF Band Indicator
- 19. High VHF Band Indicator
- 20. Low VHF Band Indicator

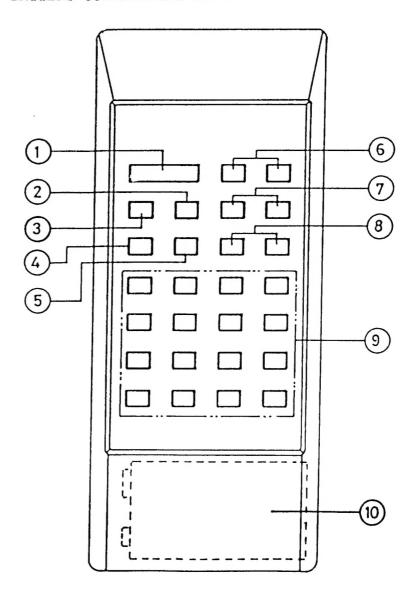


- 21. Channel Indicator
- 22. Remote Sensor
- 23. Fine Tune (+)
- 24. Fine Tune (-)
- 25. Auto Tune
- 26. AFC
- 27. Channel Tuning (+)
- 28. Channel Tuning (-)
- 29. Band Selector Button
- 30. Storage Button
- 31. Address Button
- 32. Telescopic Antenna
- 33. Telescopic Antenna Connector
- 34. Antenna Input Socket (75 Ohm)
- 35. AC Power Cord



## REMOTE HAND SET UNIT PARTS LIST ON LINE DRAWING:

- POWER ON/OFF BUTTON 1.
- 2. AFC BUTTON
- 3. MUTE BUTTON
- 4. BAND BUTTON
- 5. AUTO TUNE BUTTON
- 6. VOLUME UP/DOWN
- 7. CHANNEL UP/DOWN
- 8. TUNING UP/DOWN
- 9. CHANNEL SELECTORS
- 10. BATTERY COMPARTMENT LID.



## ALIGNMENT INSTRUCTION

## I. PLEASE READ BEFORE ATTEMPTING SERVICE

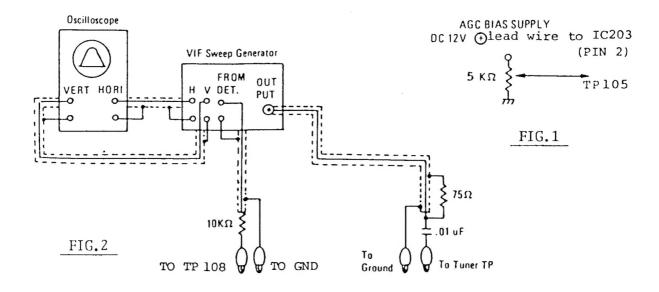
- 1. Do not connect any antenna plug directly to the tuner socket and do not connect any equipments directly to the TV chassis, otherwise it may be burnt out the TV or equipment, except an isolation transformer is used for main power source of the TV sets.
- 2. Never disconnect any leads while receiver is in operation.
- 3. Disconnect all power before attempting any repairs.
- 4. Do not short any portion of the circuits while power is on.
- 5. For reason of safety, all parts replaced should be identical, (For Parts and Parts Numbers see PARTS LIST).
- 6. Before alignment the set must be pre-heated for 30 minutes or more and erase magnetism thoroughly from CRT front chassis frame by erase coil.

## II. TEST EQUIPMENT

- 1. VIF Sweep Generator
- 2. SIF Sweep Generator
- 3. Color Bar / Dot / Cross Hatch Generator
- 4. DC Power Supply (24V)
- 5. Oscilloscope
- 6. Vacuum Tube Volt Meter
- 7. Volt Ohm Meter
- 8. High Voltage Meter
- 9. Ampere Meter (0.5 Class, DC 3mA Max.)
- 10. Demagnetizing Coil
- 11. Philips Pattern Generator
- 12. Frequency Counter
- 13. Continuous Waveform Generator

#### III. TANK COIL ALIGNMENT

- A. PREPARATION STEP (See FIG. 2)
  - 1. Connect CUTPUT lead of VIF Sweep Generator between tuner test point TP and tuner case.
  - 2. Connect lead of FROM DET between TP 108 and GND.
  - 3. Supply DC +24V to  $\oplus$  lead of D410.
  - 4. Supply RF AGC bias voltage to TP 105 (See Fig. 1).



## B. ALIGNMENT STEP (See FIG. 3).

- 1. Band switch connect to VIF high position.
- 2. Adjust AGC bias voltage for maximum amplitude of waveform.
- 3. Adjust the level of Sweep Generator to achieve 1Vp-p output.
- 4. Adjust T102 to obtain maximum amplitude of response cause at

PC (38.9 MHz) as in FIG.3.

PC. 38.9Miz

40.4MHz

FIG.3

## IV. VIF ALIGNMENT

- A. PREPARATION STEP (SEE FIG. 2)
  - 1. Connect output lead of VIF Sweep Generator between tuner test point TP and tuner case.
  - 2. Connect resistor (100 Ohm) between TP 106 and TP 107.
  - 3. Connect lead of FROM DET between TP 108 and GND.
  - 4. Supply DC +24V to (+) lead of D410.
  - 5. Supply RF AGC bias voltage to TP 105 (SEE FIG. 1).

#### B. ALIGNMENT STEP

- 1. Adjust AGC bias voltage for maximum amplitude of waveform.
- 2. Adjust the level of Sweep Generator to achieve 1Vp-p output.
- 3. Increase the output level of Sweep Generator in 20 dB.
- 4. Adjust AGC bias voltage to achieve 1Vp-p Output (on Oscilloscope).
- 5. Adjust core of T101 (C, D, E, F core) and tuner converter coil to obtain the waveform as in Fig. 4.
- 6. Increase the output level of sweep generator in 10 dB, Adjust (A) core of T101 to obtain the waveform as in Fig. 5 (D Point).
- 7. Increase the output level of sweep generator in 10dB, Adjust L101 to obtain the waveform as in Fig. 5 (E Point).

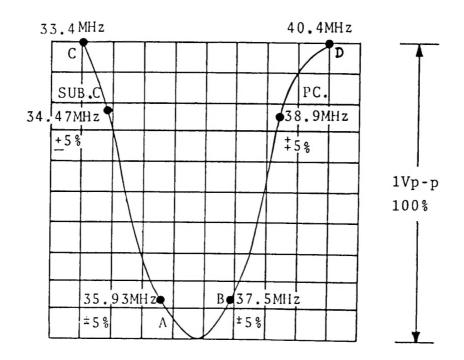
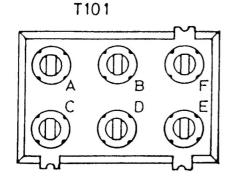
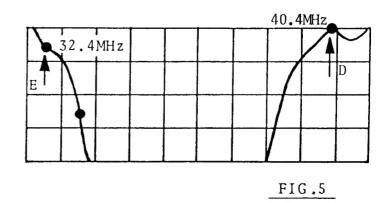


FIG.4





V. AFC ALIGNMENT

#### A. PREPARATION STEP

- 1. Connect RF AGC bias voltage at TP 105.
- 2. Remove the damping resistor (100 Ohm) at TP 106, TP 107.
- 3. Connect output lead of Sweep Generator to tuner test point TP and tuner case.
- 4. Increase the output level of Sweep Generator in 10dB.
- 5. Connect lead of FROM DET between TP102 and GND.
- 6. Supply DC +12V to ⊕ lead of D 410.

## B. ALIGNMENT STEP

- 1. Adjust the AGC bias to achieve 3Vp-p output.
- 2. Adjust T103 so that picture carrier 38.9MHz is centered as in FIG.6.

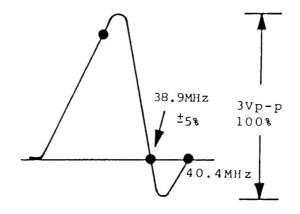
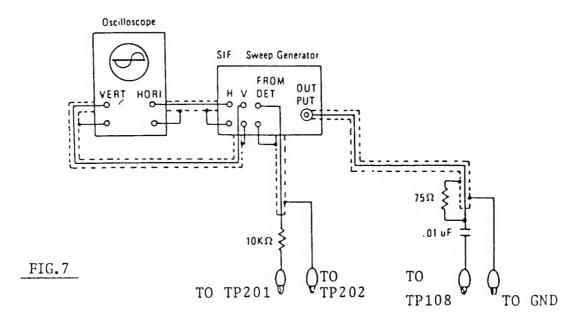


FIG.6

## VI. SIF ALIGNMENT

## A. PREPARATION STEP (See Fig. 7)

- Connect output lead of SIF sweep generator between TP108 and ground
- 2. Connect lead of FROM DET between TP201 and TP202.
- 3. Supply DC 24V to (+) lead of D 410.



#### B. ALIGNMENT STEP

- 1. Adjust output of sweep generator to achieve 4Vp-p between markers of 100 KHZ.
- 2. Adjust T104 so that sound carrier is centered as in Fig.8.
- 3. Confirm the waveform as in FIG.8.

NOTE: Input level: -30 to 0 dB.

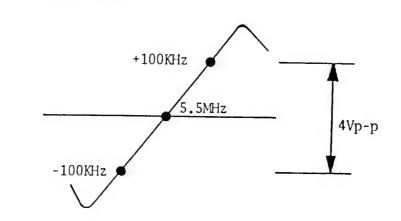


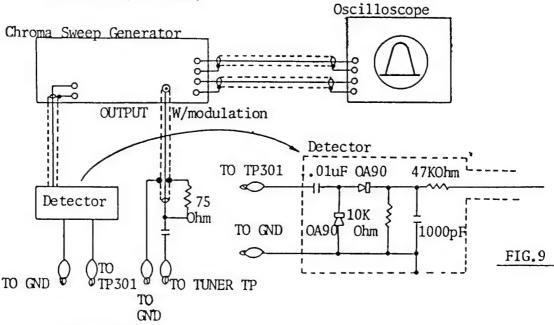
FIG.8

## VII. CHROMA ALIGNMENT

## A. PREPARATION STEP (See Fig. 9)

- 1. Supply AGC bias voltage to TP105 (See Fig. 1)
- 2. Supply DC 24V to + lead wire of D410.
- 3. Connect Pin 2, 3 of IC301 by jumper wire.
- 4. Connect output lead of chroma sweep generator to tuner test point TP.
- 5. Connect the lead of detector TP301
- 6. Set the select switch of sweep generator to modulation position.

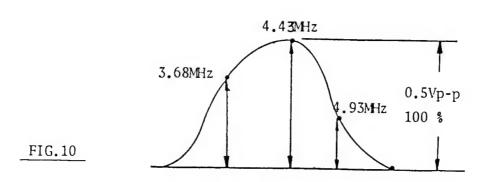
NOTE : CHROMA IF (38.9 MHz).



## B. ALIGNMENT STEP

- 1. Adjust IF AGC bias voltage to obtain the maximum output.
- 2. Adjust output level of chroma sweep generator to achieve 0.5 Vp-p at output of detector.
- 3. Adjust T301 to obtain the waveform as in Fig. 10.

NOTE : Input level :  $-20 \sim 0 \text{ dB}$ 



## VIII. HORIZONTAL CIRCUIT ALIGNMENT

- 1. Receive PHILIPS pattern. Input signal 80 dBuv.
- 2. Connect (+) lead of 100 uF capacitor to IC101 AN5150 pin(6) and ground.
- 3. Adjust VR102 to obtain the picture running at center.
- 4. Remove the 100 uF capacitor.

#### IX. VERTICAL CIRCUIT ADJUSTMENT

- 1. Set V-HOLD control (VR104) to middle position.
- 2. Set the CHANNEL SELECTOR to no signal channel.
- 3. Connect the frequency counter between V-deflection yoke and ground.
- 4. Adjust SUB-V-HOLD (VR103) to the reading of 50 Hz.
- 5. Receive Philips Pattern.
- 6. Adjust V-HEIGHT control to obtain a normal picture.

#### X. WHITE BALANCE ADJUSTMENT

- 1. Set the SCREEN control (VR514) to middle position.
- 2. Turn the red, and blue LOW-LIGHT controls (VR503, VR516) to middle position, and turn the DRIVE controls (VR518, VR505) to Widdle position.
- 3. Receive a black and white picture signal and set the AFC switch to 'ON' position.
- 4. Turn the SCREEN control (VR514) to minimum position.
- 5. Set the SUB-BRIGHTNESS control (VR401) to middle position, then turn the CONTRAST control (VR303) and COLOR control (VR304) fully counterclockwise.
- 6. Set the SERVICE switch (S301) to 'SERVICE' position.
- 7. Connect volt meter between (R513) and ground, and adjust BRIGHTNESS control (VR302) to the reading of DC 140V. If DC 140V can not be obtain, adjust the SUB-BRIGHTNESS control (VR401).
- 8. Slowly turn the SCREEN control clockwise to the point where the green color just illuminates.
- 9. The LOW-LIGHT control volume corresponded to the color appeared on the CRT, leaves as it is, and need no further adjustment for this control volume. Turn the rest of LOW-LIGHT control volumes toward clockwise to get white horizontal line on CRT.
- 10. Reset the SERVICE switch (S301) to 'NORMAL' position and turn BRIGHTNESS control (VR302) to middle position.
- 11. Adjust red and blue DRIVE controls (VR518, VR505) to obtain a uniform white raster.

12. Check the black and white picture detail for proper black and white rendition (no coloration) from lowlights to highlights and all brightness levels for proper tracking.

Proper tracking at all brightness levels can be obtain when the SCREEN control, LOW-LIGHT controls and DRIVE controls are properly adjusted. If the results are unsatisfactory, repeat from the beginning.

#### XI. FOCUS ADJUSTMENT

- 1. Set CONTRAST control to maximum position and BRIGHTNESS control to middle position.
- 2. Adjust FOCUS control (on the FBT) to obtain a sharpest and clearest picture on the CRT.

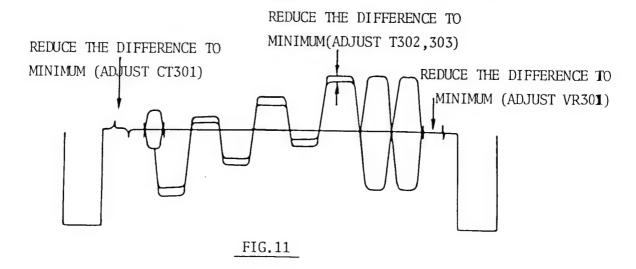
#### XII. RF AGC ALIGNMENT

- 1. Receive the signal of band-III (VHF HIGH) channel, and set the AFC switch to 'ON' position.
- 2. Set the input field strength in 62 3 dB.
- 3. Adjust RF AGC control (VR101) to the point where noise is disappeared.

## XIII. COLOR DEMODULATOR ALIGNMENT, DELAY LINE ALIGNMENT

- 1. Receive Philips pattern and set the AFC switch to 'ON' position.
- 2. Set the 'SERVICE' switch (S301) to 'SERVICE' position.
- 3. Set COLOR control (VR304) to maximum position.
- 4. Connect oscilloscope to TP304(B-out).
- 5. Adjust CT 301 to obtain the waveform as in Fig. 11.
- 6. Adjust T302, T303 and VR301 to obtain the waveform as in Fig. 11.

NOTE : Cores of T302 and T303 should be adjusted equal height of core.



#### XIV. SUB-BRIGHTNESS ALIGNMENT

- 1. Connect the negative side of DC ampere meter (3mA full scale range) to TP 401 and the positive side to ground.
- 2. Receive Philips pattern and set AFC switch set 'ON' position.
- 3. Set controls as follow:

BRIGHTNESS control ...... Min. position
CONTRAST control ...... Max. Position
COLOR control ...... Min. position

- 4. Adjust SUB-BRIGHTNESS control (VR401) to the reading of 400 uA.
- XV. COLOR PURITY ADJUSTMENT (See Fig. 12)

BEFORE ALL ADJUSTMENT DESCRIBED BELOW ARE ATTEMPTED, V-HOLD, H-HOLD, V-HIGH, B+ VOLTAGE AND FOCUSING ADJUSTMENT MUST BE COMPLETED.

- 1. Place the TV receiver facing NORTH or SOUTH.
- 2. Plug in TV receiver and turn it on.
- 3. Operate the TV receiver over 30 minutes.
- 4. Fully degauss the TV receiver by using an external degaussing coil.
- 5. Receive a crosshatch pattern and adjust the static convergence control roughly.
- 6. Loosen the clamp screw of the deflection yoke and pull the deflection yoke towards you.
- 7. Fully turn the red and blue low light controls (VR503, VR516) counter-clockwise.
- 8. Adjust the purity magnets so that green field is obtained at the center of the screen.
- 9. Slowly push the deflection yoke towards bell of CRT and set it where a uniform green field is obtained.
- 10. Tighteen the clamp screw of the deflection yoke.

## XVI. CONVERGENCE ADJUSTMENT (See Fig. 12)

- 1. Receive a dotted pattern.
- 2. Unfix the convergence magnet clamper and align red with blue dots at the center of the screen by rotating (R, B) static convergence Magnets.
- 3. Align Red / Blue with green dots at the center of the screen by rotating (RB-G) static convergence magnet.
- 4. Fix the convergence magnets by turning the clamper.
- 5. Remove the DY wedges and slightly tilt the deflection yoke horizontally and vertically to obtain the good overall convergence.
- 6. Fix the deflection yoke by wedges.
- 7. If purity error is found, follow 'PURITY ADJUSTMENT' instructions.

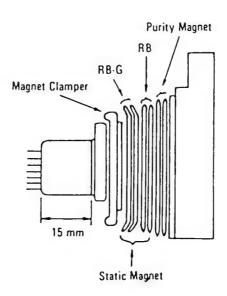
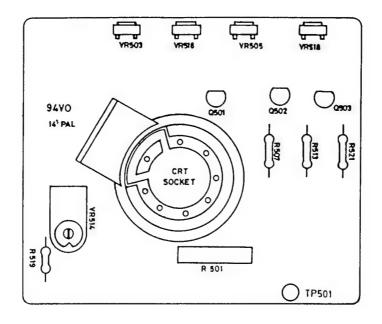
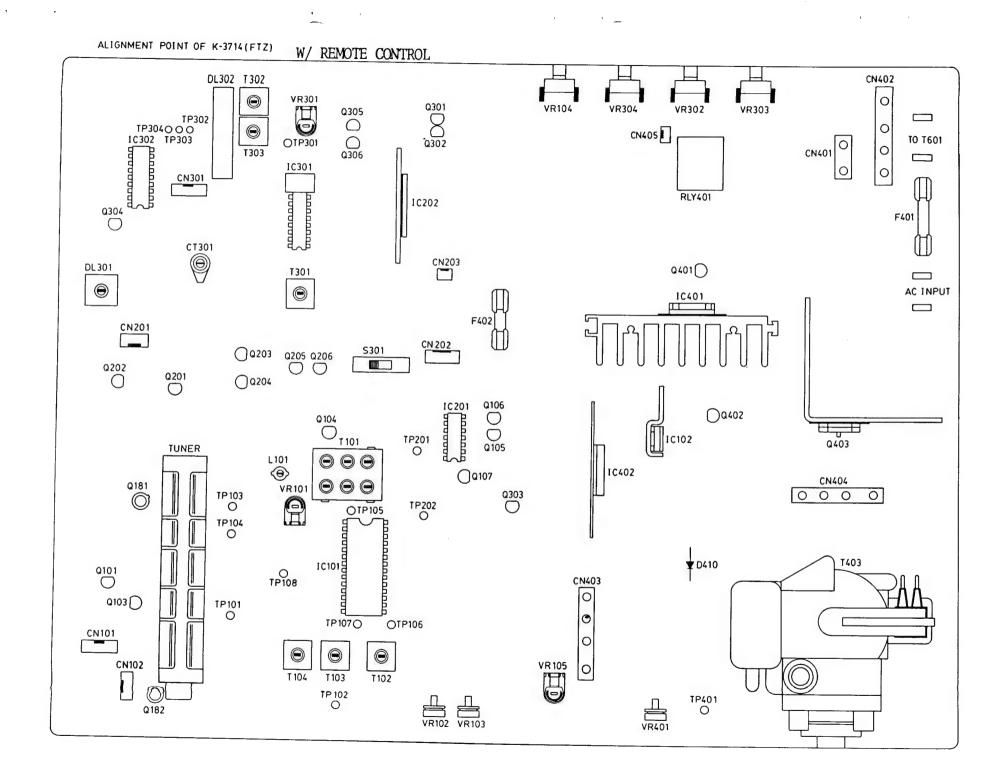


FIG.12

## ALIGNMENT POINT OF CRT. BOARD





		VOLTAGE	TABL	E	FOR T	RANSIST	ror	
SYMBOL	B (V)	C (V)	E (V)		SYMBOL	B (V)	C (V)	E (V)
Q 101	0.00	17.3	GND		Q 301	0.59	0.89	GND
Q 103	0.65	0.00	GND		Q 302	2.00	GND	0.89
Q 104	3.14	11.7	2.52	П	Q 303	0.47	11.1	0.34
Q 105	4.75	7.64	4.12		Q 304	3.77	10.8	3.12
Q 106	7.64	11.7	7.00		Q 305	0.63	0.04	GND
Q 107	4.13	11.7	3.50		Q 306	0.04	11.7	0.00
Q 201 *	1.87	6.44	1.22		Q 401	0.60	0.25	GND
Q 202 *	6.52	11.7	5.88		Q 402	0.56	71.57	GND
Q 203 *	1.02	8.36	0.40		Q 403	0.00	112	GND
Q 204 *	8.33	11.7	7.73		Q 501	2.70	126.4	2.40
Q 205 *	1.60	11.7	1.00		Q 502	2.70	126.7	2.30
Q 206 *	0.68	2.00	GND		Q 503	2.70	126.8	2.30
	VOLTAGE TABLE FOR MANUAL TRANSISTOR ONLY							
Q 102	4.10	33.4	3.60					
VOLTA	GE TABI	LE FOR	REMO	T	E TRANS	ISTOR	ONLY	
Q 181	0.56	6.90	GND	П	Q 602	10.9	11.5	11.6
Q 182	26.6	111	26.1		Q 603	11.6	0.00	11.6
Q 801	0.00	7.60	0.00		Q 604	11.6	0.00	11.6
Q 802	0.00	7.57	GND		Q 605	26.0	0.00	26.1
Q 701	4.34	4.97	4.21		Q 606	0.72	0.00	GND
Q 601	1.33	8.25	0.72		Q 607	0.14	2.59	GND

NOTE Voltage are taken under tuned condition with

CONTRAST

Maximum Position

BRIGHTNESS

Center Position

COLOR

Center Position

SIGNAL INPUT

80 dB uV

CHANNEL SETTING :

The Last Channel of UHF  $\operatorname{High}$ 

REMARKS

\* OPTIONAL

	VOLTAGE TABLE FOR 1C							
SYMBOL PIN NO.	IC 101 (V)	IC 102 (V)	* IC 201 (V)	IC 202 (V)	IC 301 (V)	IC 302 (V)	IC 401 (V)	IC 402 (V)
1	4.76	16.2	2.52	10.9	5.06	1.29	87.8	GND
2	5.66	11.7	2.52	4.85	3.87	0.65	0.23	12.7
3	7.50	GND	2.52	0	4.46	9.49	267	25.6
4	5.01		1.00	2.60	7.31	8.03	0.08	1.40
5	3.15		0	10.9	7.05	0	80.4	0
6	6.46		0	11.1	6.94	1.63		1.04
7	3.04		GND	GND	0.37	3.16		25.3
8	3.04		5.87	12.0	2.26	3.14		
9	4.69		0.33	23.0	2.26	3.09		
10	4.69		0.33		9.44	GND		
11	2.46		0.33		9.42	8.76		
12	7.95		7.47		8.36	3.46		
13	3.62		7.47		2.98	8.80		
14	6.30		11.7		2.97	8.87		
15	6.31				0	3.46		
16	9.46				10.8	6.78		
17	1.96				GND	10.8		
18	5.32					10.6		
19	5.33							
20	9.38							
21	GND							
22	3.11							
23	0.83							· · · · · · · · · · · · · · · · · · ·
24	4.52							
25	0.52							
26	3.90							
27	0.41							
28	4.75							

NOTE :

Voltage are taken under tuned condition with

CONTRAST Maximum Position BRIGHTNESS Center Position **COLOR** Center Position

SIGNAL INPUT : CHANNEL SETTING : 80 dBuv

The Last Channel of UHF High

REMAKR: Optional

	VOLTAGE	TABLE F	OR REM	OTE IC	ONLY
PIN NO. SYMBOL	IC 601 (V)	IC 602 (V)	IC 603 (V)	IC 701 (V)	IC 801 (V)
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40	GND 0.00 26.0 5.70 2.59 NC 1.90 1.87 5.00 GND 2.00 0.11 0.24 2.56 NC 5.00 4.93 4.93 4.92 0.18 0.20 0.20 0.23 5.00 0.73 4.69 0.07 0.07 4.92 5.00 GND 1.87 5.00 4.93 4.92 0.18 0.20 0.20 0.10 0.11 0.24 1.90 0.10 0.11 0.24 1.90 0.10 0.11 0.24 1.90 0.10 0.11 0.25 0.10 0.11 0.20 0.10 0.11 0.20 0.20 0.20 0.20 0.20 0.20 0.20 0.20 0.20 0.10 0.10 0.11 0.20 0.20 0.20 0.20 0.20 0.20 0.07 0.07 4.92 5.00 GND 4.91 4.91 4.91 4.90 0.50 GND 11.6 11.6 11.6	11.4 5.00 GND	11.6 0.10 6.61 6.74 5.82 0.11 NC NC NC 0.44 0.49 0.00 GND	4.22 4.23 4.23 GND 0.91 0.91 5.00	9.00 8.14 9.00 8.99 8.99 8.99 0.00 0.00 0.00 0.00

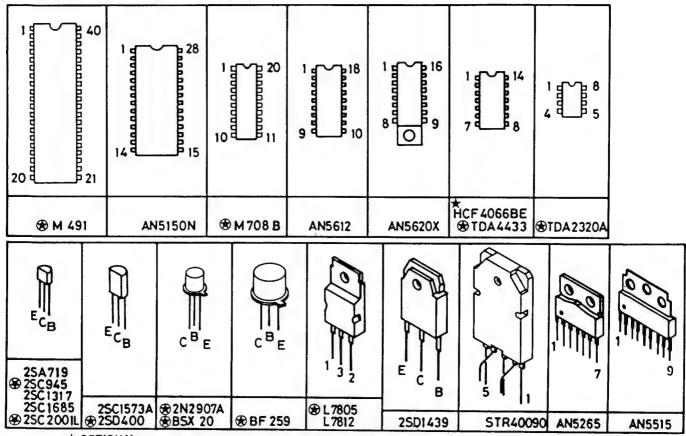
NOTE : Voltage are taken under tuned condition with

CONTRAST : Maximum Position
BRIGHTNESS : Center Position
COLOR : Center Position

SIGNAL INPUT : 80 dBuV

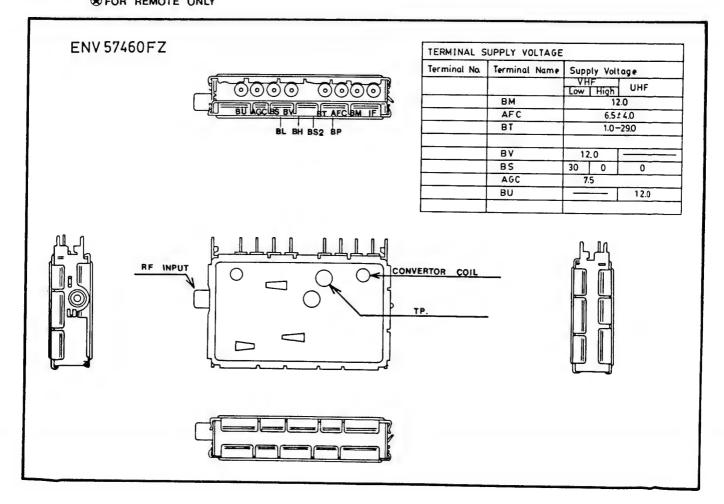
CHANNEL SETTING: The Last Channel of UHF High

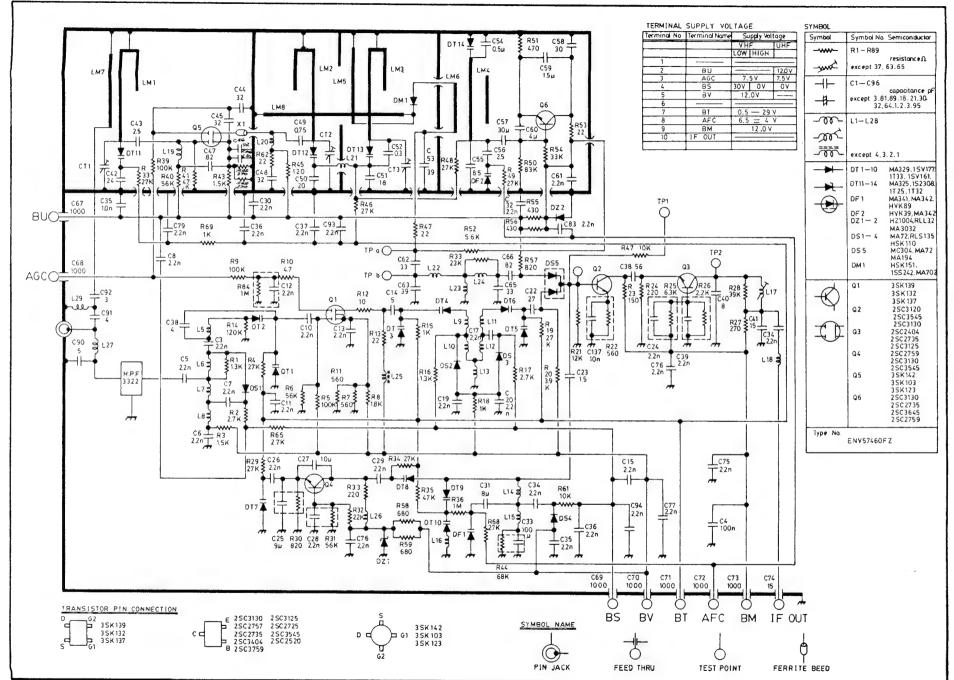
## TRANSISTOR & IC IDENTIFY



**★** OPTIONAL

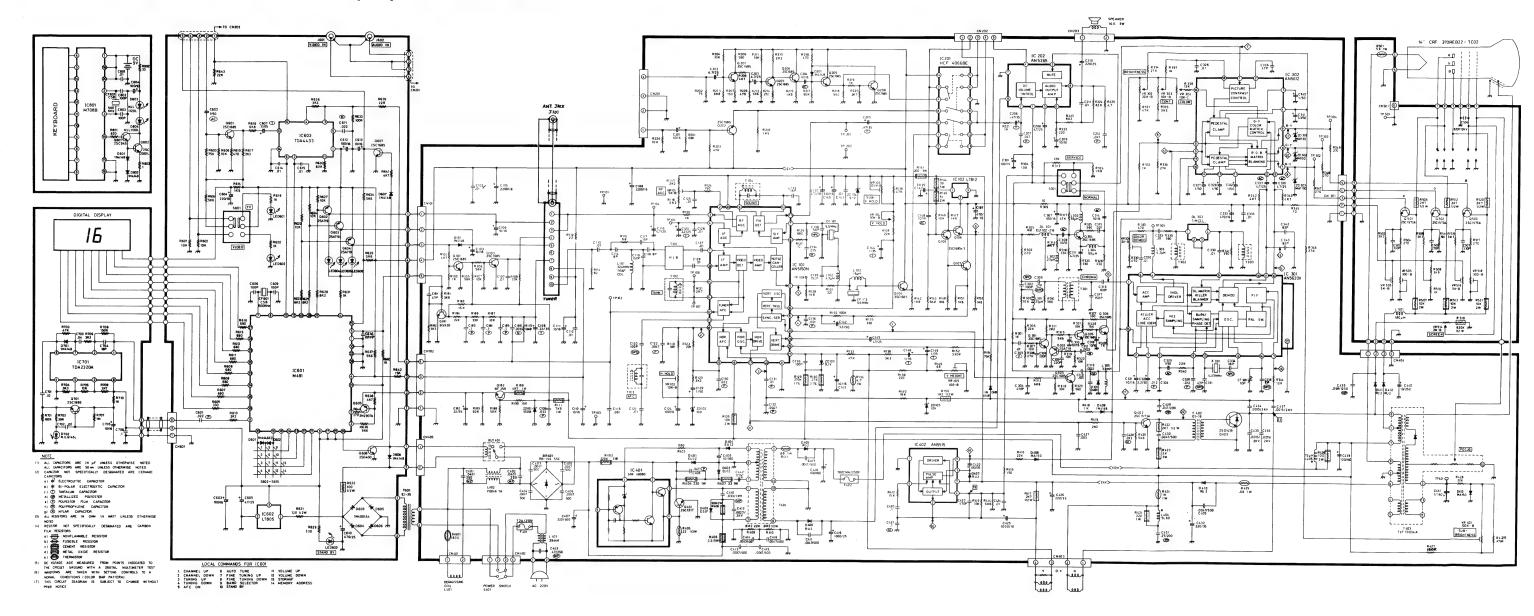
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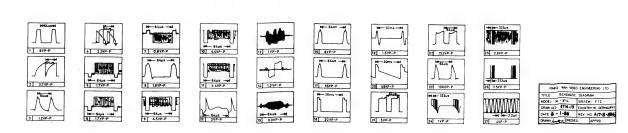


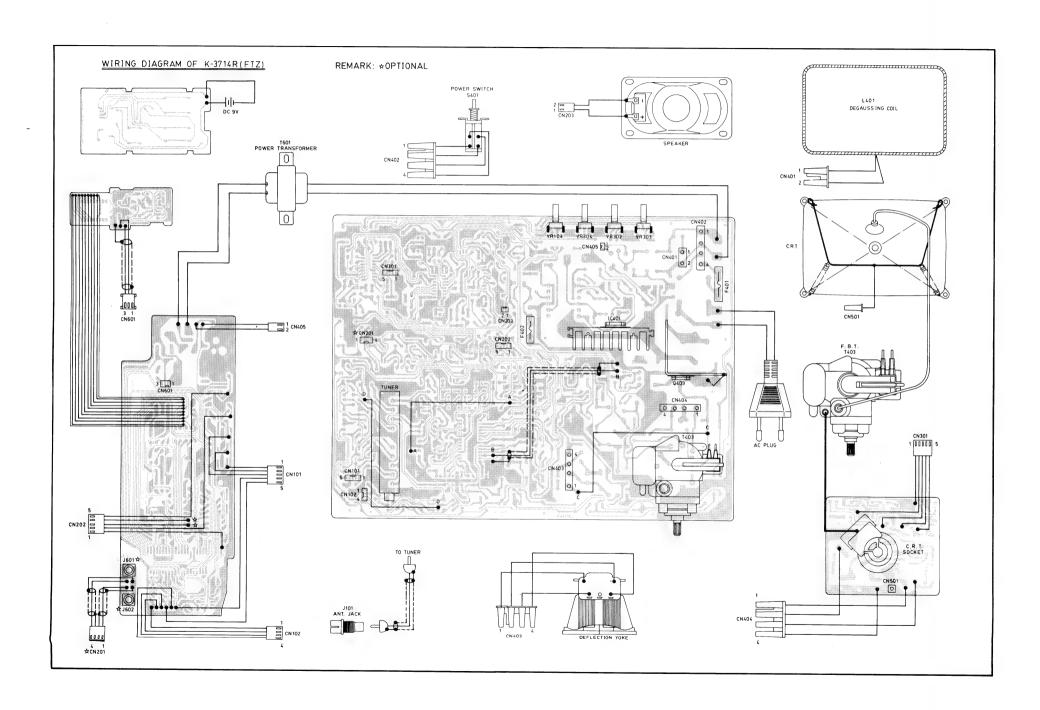


S CHEMATI  $\Box$ D IAGRAM 0 Н TUNE  $\nabla$ FO N S SX TEM d AL-B/ G (FTZ \* ENV5 7460 Н 2 \*

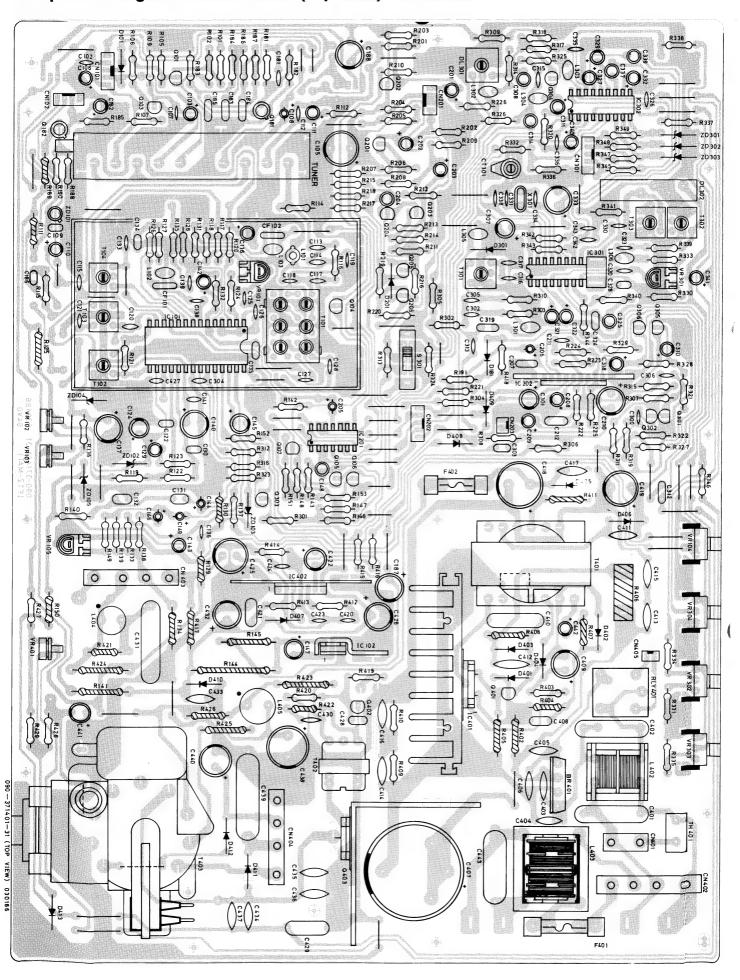
## Schematic Diagram for System PAL-B/G (FTZ) W/Remote Control



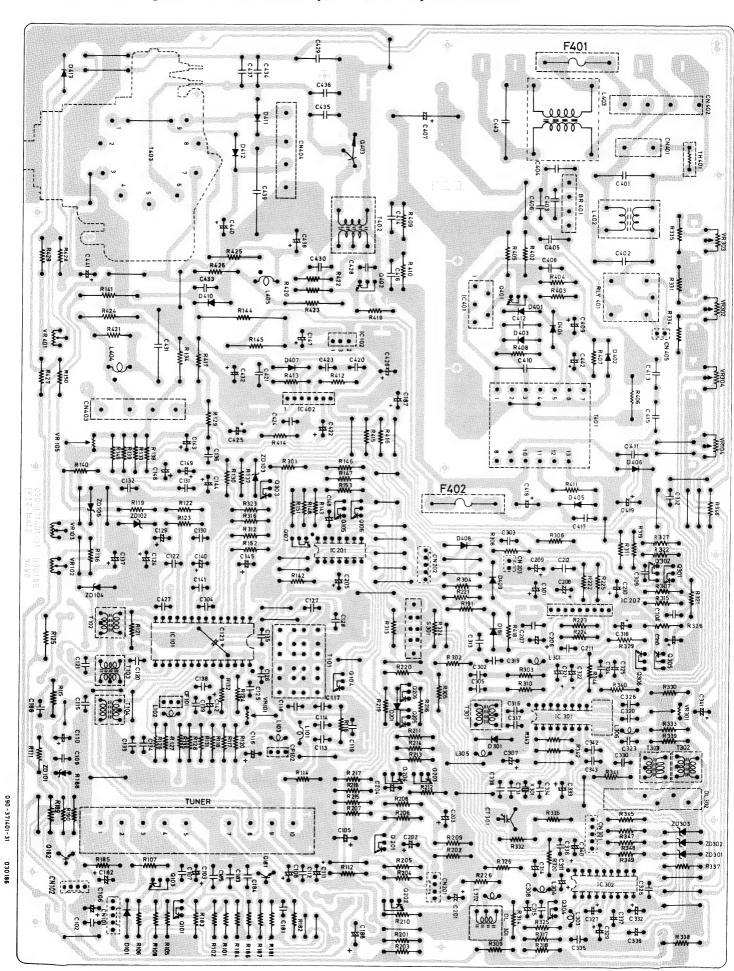




## Component Diagram of Main Board (Top View) for Remote

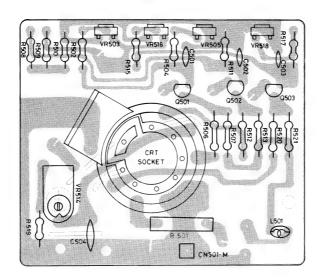


## Component Diagram of Main Board (Bottom View) for Remote

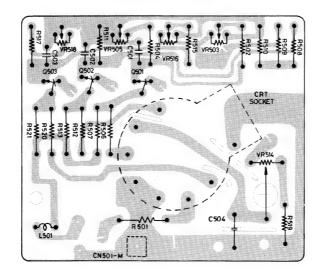


## Component Diagram of CRT. Board

(Top View)

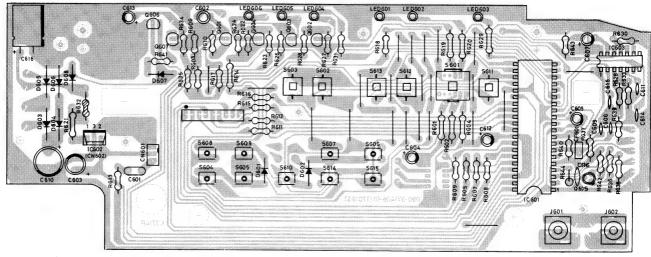


## (Bottom View)



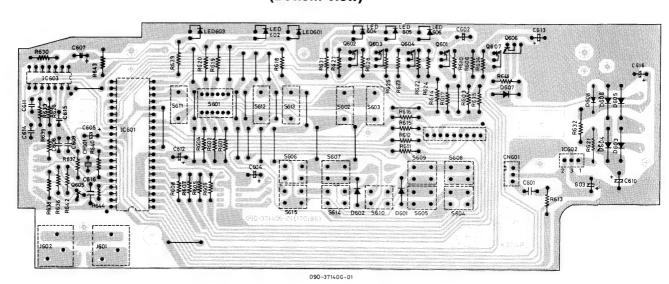
## Component Diagram of 'R' Panel

## (Top View)



090-371406-01

## (Bottom View)

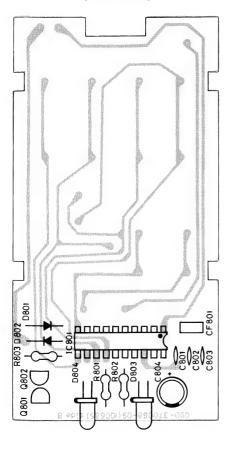


29

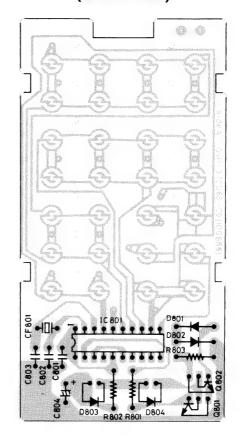
## **Component Diagram**

## **Remote Handset Board**

(Top View)

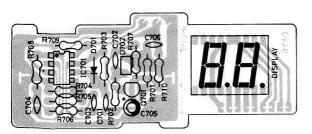


(Bottom View)

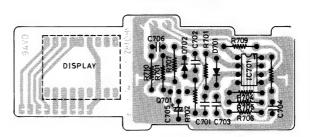


Sensor Board

(Top View)



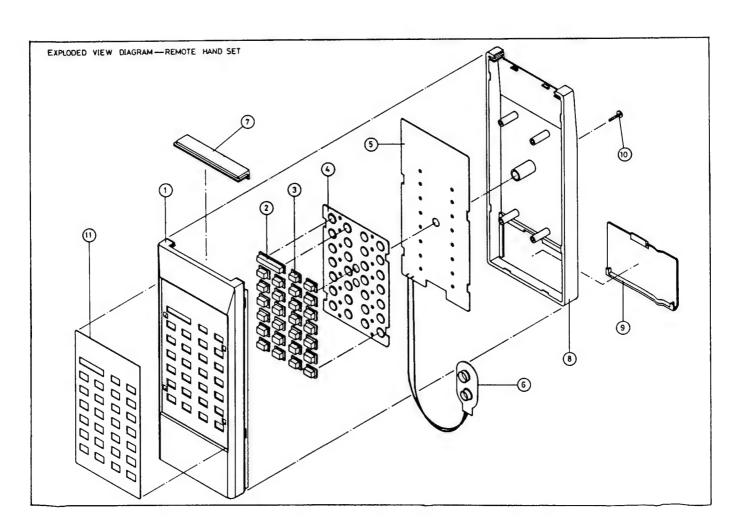
(Bottom View)

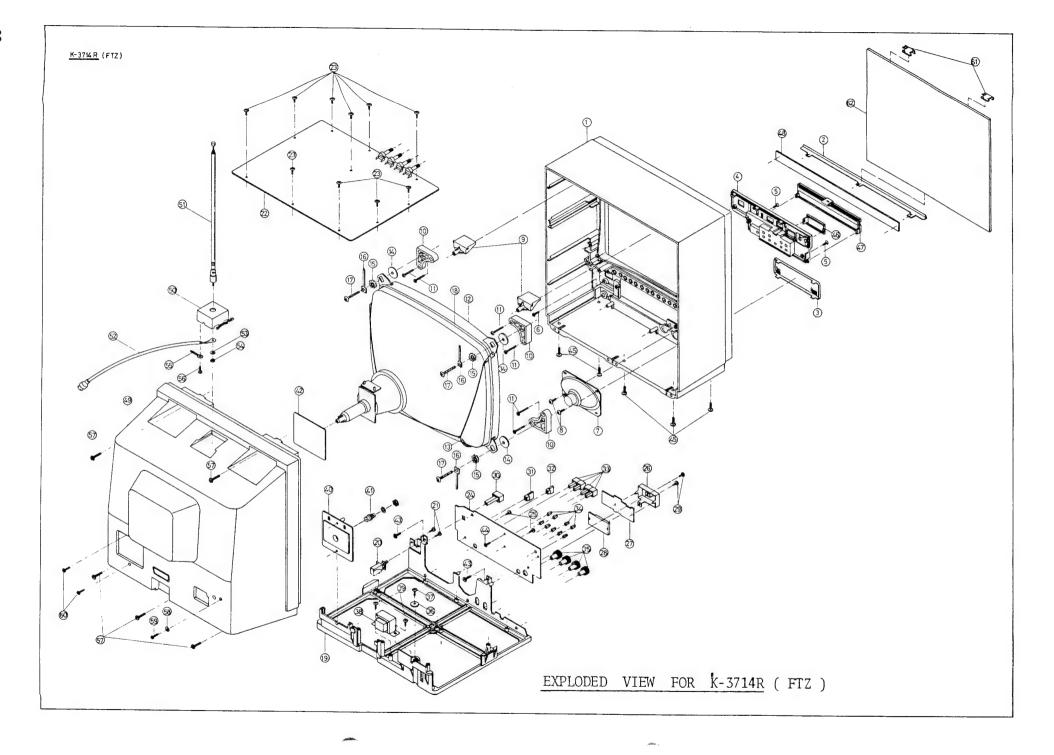


## REMOTE HANDSET

## EXPLODED VIEW PARTS LIST :

REF. NO.	PARTS NO.	DESCRIPTION	QTY.
1	201-370001-01	CABINET TOP	1
2.	292-370001-01	POWER KNOB	1
3	277-370001-01	CHANNEL KNOB	26
4	334-370001-01	CONDUCTIVE RUBBER	1
5		P.C.BOARD ASS'Y	1
6	710-114000-00	BATTERY CLIP (9V)	1
7	263-370002-01	FRONT LENS	1
8	203-370001-01	CABINET BOTTOM	1
9	210-370001-01	BATTERY COVER	1
10	610-260108-10	SELF-TAPPING SCREW R/T 2.6 x 8mm	1
11	411-370001-XX	NAME PLATE	1





## MODEL K-3714R (FTZ)

## EXPLODED VIEW PARTS LIST

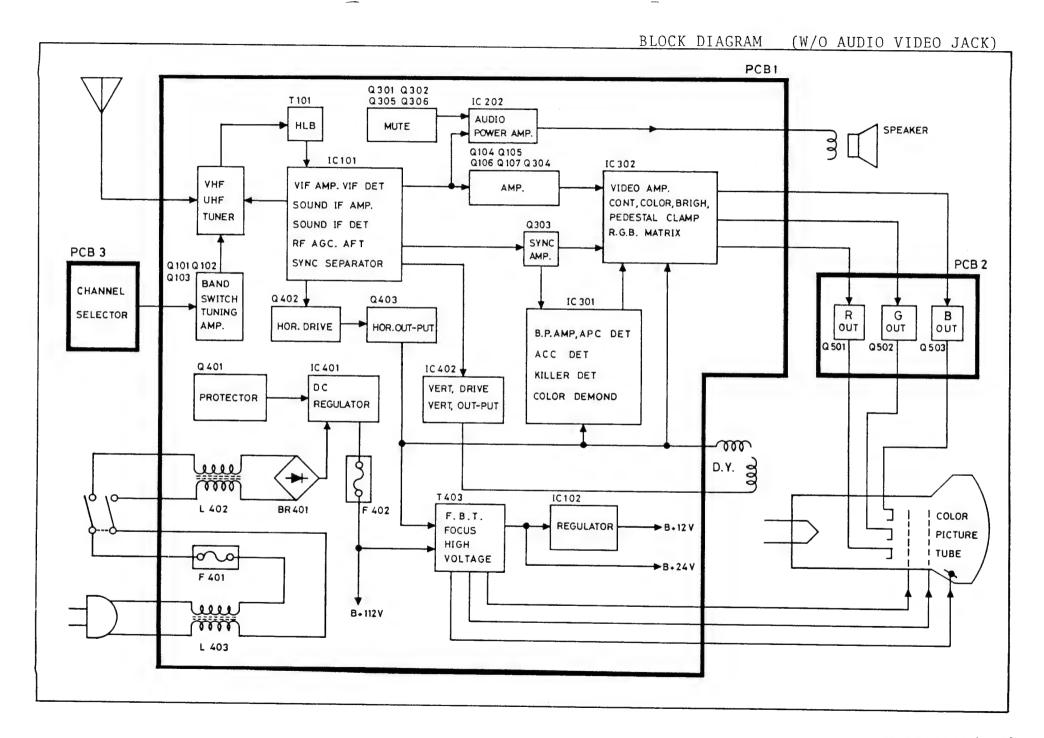
REF. NO.	PARTS NO.	DESCRIPTION	Qty.
1.	200-371401-01	CABINET FRONT	1
2.	469-371401-01	GLASS SUPPORTER	1
3.	403-371401-01	SPEAKER GRILL	1
4.	230-371403-01	FRONT PANEL 'C'	1
5.	611-300210-10	SELF-TAPPING SCREW K/T 3.0 x 10mm	2
6.	610-260108-10	SELF-TAPPING SCREW R/T 2.6 x 8mm	1
7.	066-762000-06	SPEAKER	1
8.	612-300210-10	SELF-TAPPING SCREW W/T 3.0 x 10mm	2
9.	229-370101-01	PLASTIC BRACKET	2
10.	259-371403-01	PAL CRT MTG. BRACKET	4
11.	614-400416-10	SELF-TAPPING SCREW B/T 4.0 x 16mm	8
12.	102-214001-11	COLOR PICTURE TUBE	1
13.	477-371601-01	CRT SPRING	2
14.	334-371601-01	RUBBER RING	4
15.	437-371601-01	PICTURE TUBE WASHER	4
16.	469-371601-01	DEGAUSSING COIL CLAMPER	4
17.	614-500238-10	SELF-TAPPING SCREW B/T 5.0 x 38mm	4
18.		DEGAUSSING COIL	1
19.	220-371401-01	CHASSIS BRACKET	1
20.	046-100001-01	POWER SWITCH	1
21.	600-305006-10	MACHINE SCREW P/H 3.0 x 6mm	2
22.		MAIN P.C.BOARD ASS'Y	1
23.	612-300210-10	SELF-TAPPING SCREW W/T 3.0 x 10mm	10
24.		FRONT CONTROL P.C.BOARD ASS'Y	1
25.	610-300108-10	SELF-TAPPING SCREW R/T 3.0 x 8mm	2
26.	483-371401-01	SHIELD BOX TOP	1
27.		REMOTE RECEIVE P.C.BOARD ASS'Y	1
28.	483-371402-01	SHIELD BOX BOTTOM	1
29.	610-300108-10	SELF-TAPPING SCREW R/T 3.0 x 8mm	2
30.	292-371404-01	POWER KNOB	1
31.	292-371403-01	STAND BY KNOB	1

## MODEL K-3714R (FTZ)

## EXPLODED VIEW PARTS LIST

REF. NO.	PARTS NO.	DESCRIPTION	Qty.
32.	292-371401-01	TV / VIDEO KNOB	1
33.	277-371402-01	VOLUME / CHANNEL KNOB 'B'	4
34.	292-371405-01	PRESET CONTROL KNOB	9
35.	292-371402-01	TV CONTROL KNOB	4
36.	530-140033-16	FIBER WASHER	1
37.	612-300210-10	SELF-TAPPING SCREW W/T 3.0 x 10mm	1
38.	001-353714-XX	POWER TRANSF. EI-35	1
39.	612-300210-10	SELF-TAPPING SCREW W/T 3.0 x 10mm	2
40.	280-371602-01	JACK PLATE	1
41.	061-480004-00	ANT. SOCKET W/NUT & WAHSER	1
42.		CRT P.C.BOARD ASS'Y	1
43.	614-400416-10	SELF-TAPPING SCREW B/T 4.0 x 16mm	2
44.	610-300108-10	SELF-TAPPING SCREW R/T 3.0 x 8mm	1
45.	614-400412-10	SELF-TAPPING SCREW B/T 4.0 x 12mm	5
46.	263-371401-01	CABINET FRONT LENS	1
47.	219-371401-01	PANEL DOOR	1
48.	266-371401-XX	CHANNEL LENS	1
49.	202-371401-01	CABINET BACK	1
50.	259-371301-01	1 ROD ANT. HOLDER 'A'	1
51.	482-407278-01	ROD ANT. 4 SECTION 7 x 278mm SWIVEL	1
52.		75 OHM PARALLED CABLE	1
53.	631-085042-45	INTERNAL TOOTH WASHER	1
54.	620-407030-70	STEEL NUT M4	1
55.	451-371601-01	WIRE DRESS	1
56.	610-300108-10	SELF-TAPPING SCREW R/T 3.0 x 8mm	1
57.	614-400416-10	SELF-TAPPING SCREW B/T 4.0 x 16mm	5
58.	634-140033-10	METAL WASHER 14 x 3.3 x 1.0mm THK.	1
59.	600-305012-10	MACHINE SCREW P/H 3.0 x 12mm	1
60.	610-300110-00	SELF-TAPPING SCREW R/T 5.0 x 10mm 'BL\CK'	2
61.	259-371402-01	GLASS HOLDER	2
62.	581-371401-01	FRONT GLASS	1

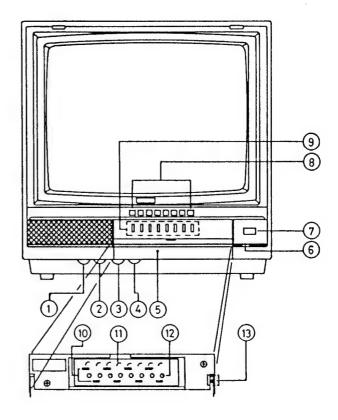
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## CONTROL LOCATION

#### FRONT VIEW OF UNIT:

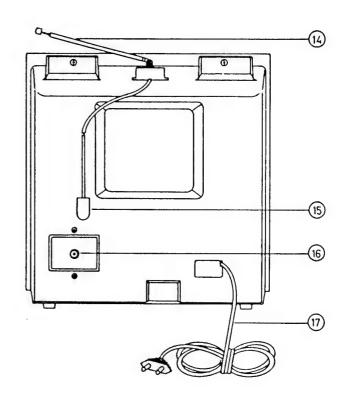
- 1. Contrast Control
- 2. Brightness Control
- 3. Color Control
- 4. Vertical Hold Control
- 5. Pre-Set Tuning Compartment Cover
- 6. Volume Control
- 7. Power ON/OFF Switch
- 8. Channel Indicator
- 9. Channel Selector
- 10. Pre-Set Tuning Controls
- 11. Band Selector
- 12. Channel Pointer
- 13. AFC Switch



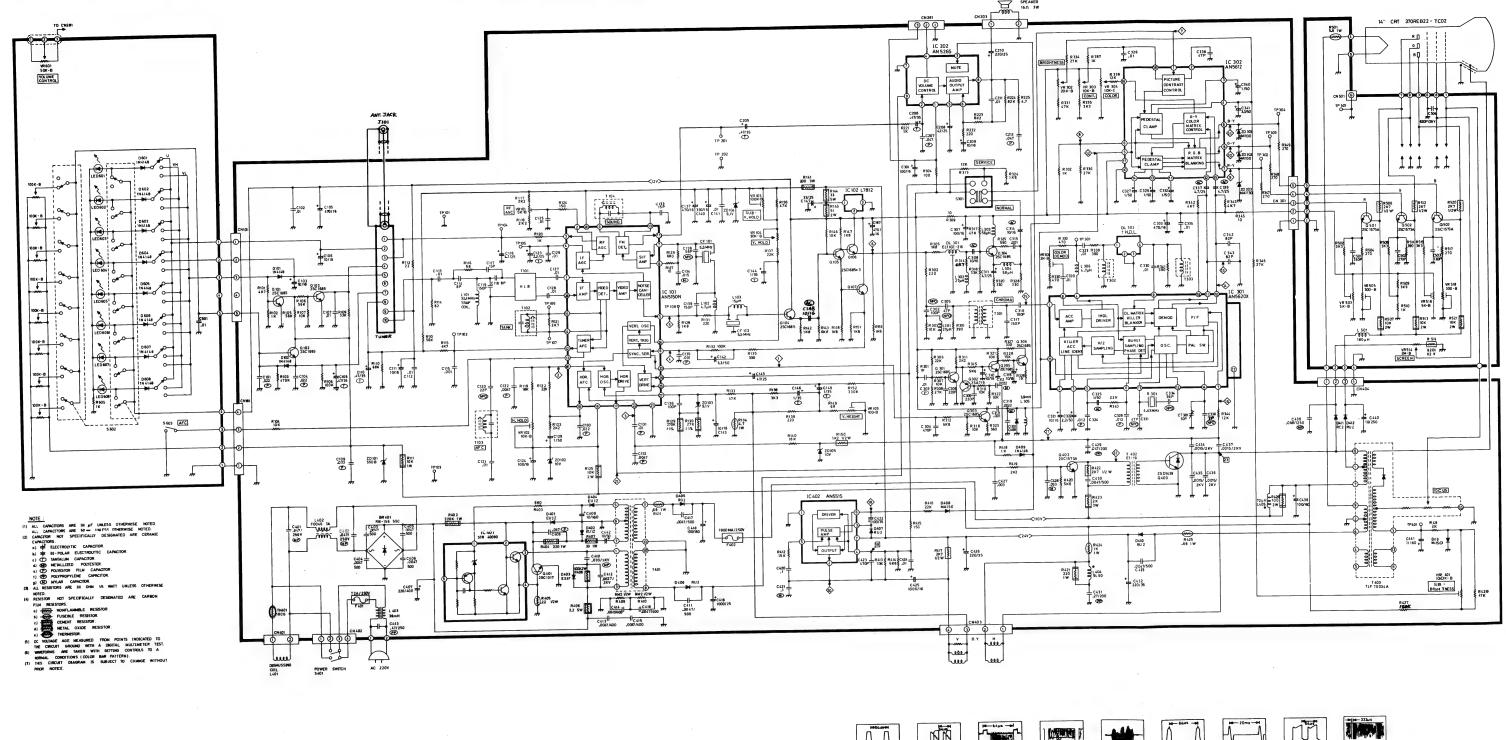
## REAR VIEW OF UNIT:

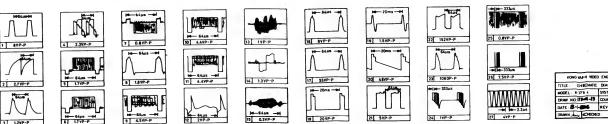
Telescopic Antenna

- 15. Telescopic Antenna Connector
- 16. Antenna Input Socket (75 Ohm)
- 17. AC Power Cord

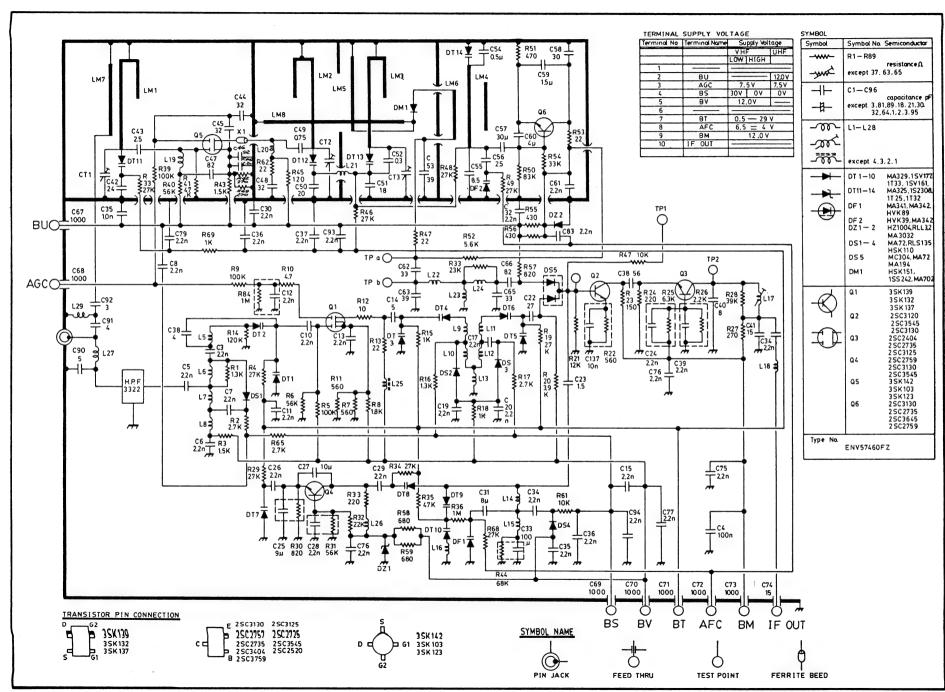


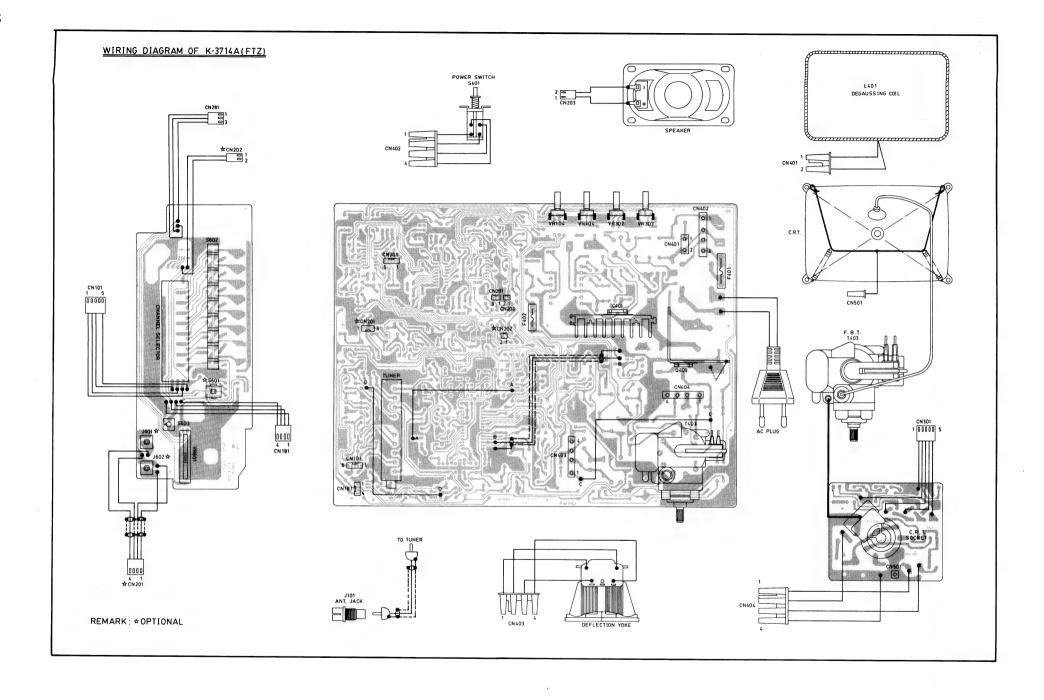
## Schematic Diagram for System PAL-B/G (FTZ) Manual (W/O Audio, Video in Jack)





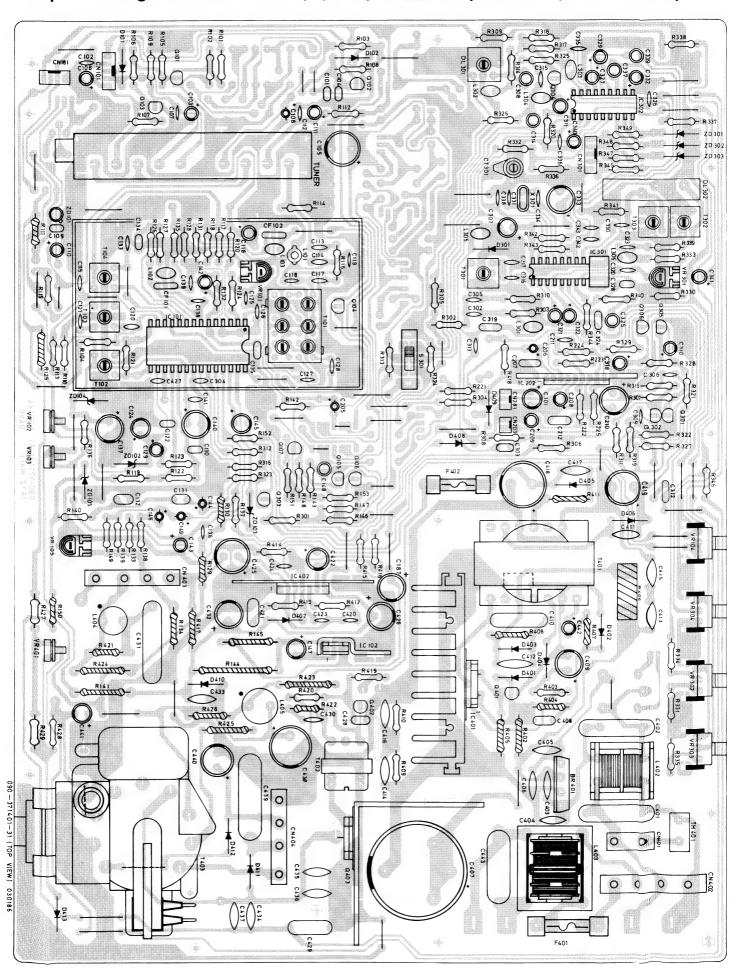




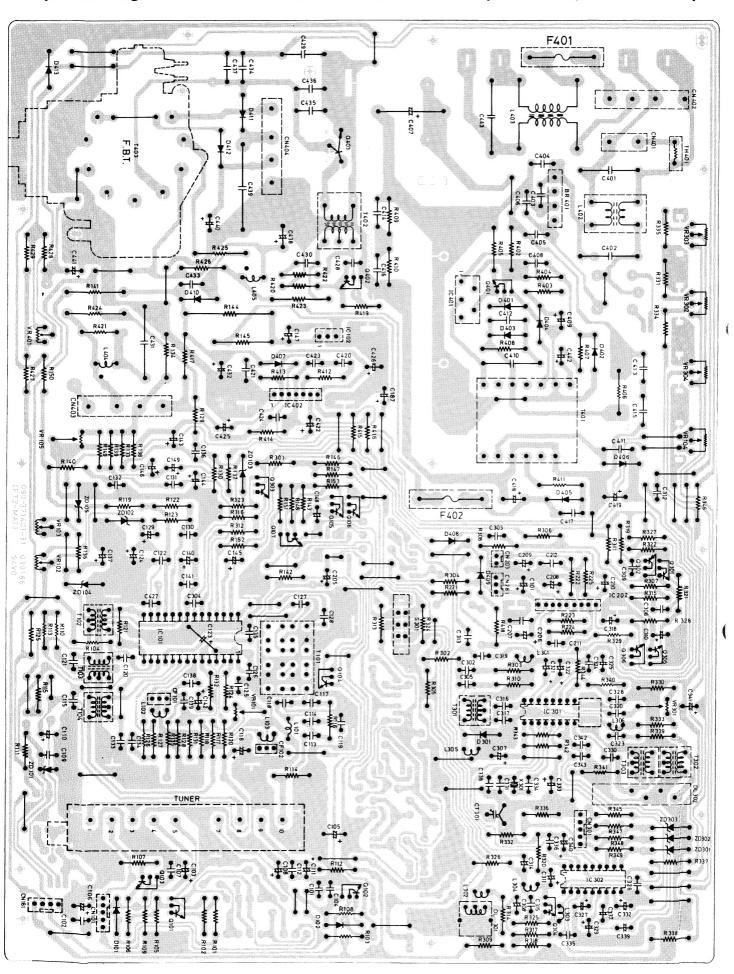


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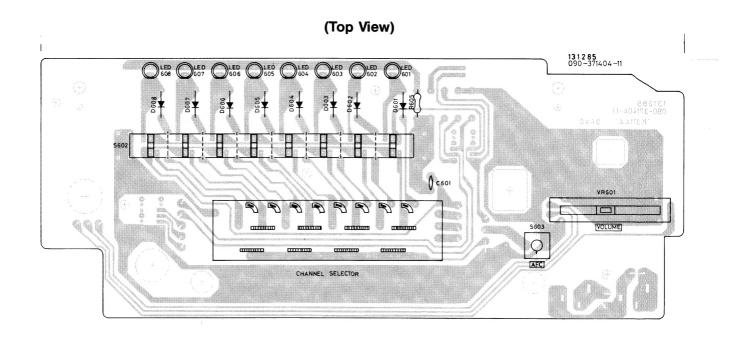
## Component Diagram of Main Board (Top View) for Manual (W/O Audio, Video in Jack)



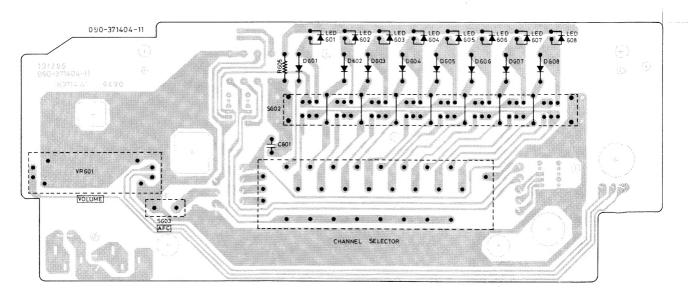
## Component Diagram of Main Board (Bottom View) for Manual (W/O Audio, Video in Jack)



## Component Diagram of 'A' Panel (W/O Audio, Video in Jack)



## (Bottom View)



EXPLODED VIEW FOR K-3714A \* W/O AUDIO; VIDEO IN JACK \*

## MODEL K-3714A (FTZ, W/O Video, Audio in Jack)

## Exploded View Parts List

REF. NO.	PARTS NO.	DESCRIPTION	Qty.
1.	200-371401-01	CABINET FRONT	1
2.	469-371401-01	GLASS SUPPORTER	1
3.	403-371401-01	SPEAKER GRILL	1
4.	230-371401-XX	FRONT PANEL 'A'	1
5.	611-300210-10	SELF-TAPPING SCREW K/T 3.0 x 10mm	2
6.	610-260108-10	SELF-TAPPING SCREW R/T 2.6 x 8mm	1
7.	066-762000-06	SPEAKER	1
8.	612-300210-10	SELF-TAPPING SCREW W/T 3.0 x 10mm	2
9.	229-370101-01	PLASTIC BRACKET	2
10.	259-371403-01	PAL CRT MTG. BRACKET	4
11.	614-400416-10	SELF-TAPPING SCREW B/T $4.0 \times 16$ mm	8
12.	102-214001-11	COLOR PICTURE TUBE	1
13.	477-371601-01	CRT SPRING	2
14.	334-371601-01	RUBBER RING	4
15.	437-371601-01	PICTURE TUBE WASHER	4
16.	469-371601-01	DEGAUSSING COIL CLAMPER	4
17.	614-500238-10	SELF-TAPPING SCREW B/T 5.0 x 38mm	4
18.		DEGAUSSING COIL	1
19.	220-371401-01	CHASSIS BRACKET	1
20.	046-100001-01	POWER SWITCH	1
21.	600-305006-10	MACHINE SCREW P/H 3.0 x 6mm	2
22.		MAIN P.C.BOARD ASS'Y	1
23.	612-300210-10	SELF-TAPPING SCREW W/T 3.0 x 10mm	10
24.		FRONT CONTROL P.C.BOARD ASS'Y	1
25.	610-300108-10	SELF-TAPPING SCREW R/T 3.0 x 8mm	4
26.	292-371404-01	POWER KNOB	1
27.	273-371401-01	SLIDE VOLUME KNOB	1
28.	277-371401-01	CHANNEL KNOB	8
29.	292-371402-01	TV CONTROL KNOB	4
30.	530-140033-16	FIBER WASHER	1